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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/632,298	04/12/96	MOHSEN	A M-1007US

B3M1/0326
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EXAMINER

TRANS, V

ART UNIT	PAPER NUMBER
2304	4

DATE MAILED: 03/26/97

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☒ Responsive to communication(s) filed on April 12, 1996
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 months month(s) or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-77 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-77 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

Art Unit: 2304

1. This application has been examined.
2. In the preliminary amendment filed on April 12, 1996, claims 20 and 21 have been amended and newly claims 23-77 have been added. Thus, claims 1-77 are pending in this application.
3. Claims 1-77 are rejected under the judicially created doctrine of obviousness-type double patenting as being patentable over the prior invention as set forth in claims 1-17 of U.S. Patent No. 5,377,124. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to the same scope of the invention.

The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of monopoly by prohibiting claims in a second patent not patentably distinct from claims in a first patent. In re Vogel, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2304

5. Claims 1-77 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Chang et al (U.S. Pat. No. 5,295,082).

Chang et al disclose a method for interconnecting integrated circuits mounted on a multichip module so as to minimize spacing between the Ics and maximize their density. A multichip module includes a plurality of Ics that are mounted on a substrate. The Ics are electrically connected to pads spaced apart from each other and offset from the boundaries of the Ics to define vertical routing channels and horizontal routing channels. The horizontal routing channel includes a top routing channel, a bottom routing channel and a central routing channel. Initially, a minimal number of tracks are provided in the central routing channel. Each pad has an electrical connection point or pin associated with it and the pins are organized into sets. The method provides for dividing the nets into two pin subsets. Each subnet in the horizontal routing channel is assigned to a vertical track so as to minimize violation of a constraint graph. Horizontal tracks are assigned to the subnets so as to minimize an associated element in a cost matrix of subnets and tracks. If any subnet then still remains unconnected, an additional track is added to the central routing channel and the steps of method are then repeated.

5. The additional cited references are considered as art being relevant to this application. Thus, applicant is requested to consider them fully when responding to this office action.

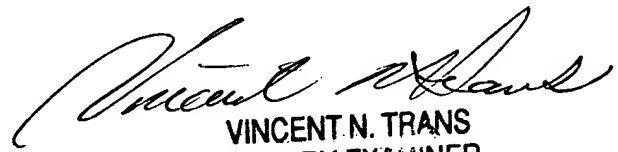
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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent N. Trans whose telephone number is (703) 305-9750.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-³⁹⁰⁰~~9600~~.


VINCENT N. TRANS
PRIMARY EXAMINER
GROUP 2300